

CLAIMS

What is claimed is:

1. A scroll compressor comprising:
 - a sealed housing;
 - a first scroll member having a first base and a first generally spiral wrap extending from said first base, a discharge pressure chamber on a first side of said first base and a suction pressure chamber on a second side of said first base;
 - a second scroll member having a second base and a second generally spiral wrap extending from said second base, said wraps of said first and second scroll members interfitting to define compression chambers;
 - a motor for driving said second scroll member to orbit relative to said first scroll member;
 - a valve for controlling the communication of gas between said compression chambers and said discharge pressure chamber, said valve disposed in a valve chamber of said first scroll member; and
 - a valve retainer for said valve, wherein a snap fit connector mounts said valve retainer to said first scroll member, said snap fit connector flexible between a disengaged position wherein said valve retainer is disengaged from said first scroll member and an engaged position wherein said valve retainer is engaged to said first scroll member.

2. The scroll compressor of Claim 1 wherein said snap fit connector comprises an opening and a protrusion, said protrusion disposed in said opening when in said engaged position and said protrusion out of said opening when in said disengaged position.
3. The scroll compressor of Claim 2 wherein said opening comprises a groove and said protrusion comprises a ridge sized to be received by said groove.
4. The scroll compressor of Claim 3 wherein said groove is disposed on said valve chamber and said ridge is disposed on said valve retainer.
5. The scroll compressor of Claim 1 where said valve retainer has a body spaced from a valve chamber bottom of said valve chamber, said valve spaced between said body and said valve chamber bottom.
6. The scroll compressor of Claim 5 wherein said body has a body top spaced by a body side from a body bottom, said body having a pressure hole on said body side extending to said body bottom, said pressure hole for creating suction on said body bottom for retaining said valve.
7. The scroll compressor of Claim 5 wherein said body has at least one leg, said leg extending between said body and said valve chamber bottom.

8. The scroll compressor of Claim 5 wherein said body has at least one leg, said leg extending from said body towards a valve chamber rim.
9. The scroll compressor of Claim 8 wherein said leg comprises a portion of said snap fit connector.
10. The scroll compressor of Claim 1 wherein said valve retainer has a discharge opening for communicating gas from said valve chamber to said discharge pressure chamber.

11. A scroll compressor comprising:
 - a sealed housing;
 - a first scroll member having a first base and a first generally spiral wrap extending from said first base, said first scroll member defining a discharge pressure chamber on a first side of said first base and a suction pressure chamber on a second side of said first base;
 - a second scroll member having a second base and a second generally spiral wrap extending from said second base, said wraps of said first and second scroll members interfitting to define compression chambers;
 - a motor for driving said second scroll member to orbit relative to said first scroll member;
 - a valve for controlling the communication of gas between said compression chambers and said discharge pressure chamber, said valve disposed in a valve chamber of said first scroll member;
 - a valve retainer for said valve;
 - a snap fit connector mounting said valve retainer to said first scroll member, said snap fit connector flexible between a disengaged position wherein said valve retainer is disengaged from said first scroll member and an engaged position wherein said valve retainer is engaged to said first scroll member;
 - wherein said valve retainer has a body spaced from a valve chamber bottom of said valve chamber, said valve spaced between said body and said valve chamber bottom; and

wherein said snap fit connector comprises an opening and a protrusion, said protrusion disposed in said opening when in said engaged position and said protrusion out of said opening when in said disengaged position.

12. The scroll compressor of Claim 11 wherein said opening comprises a groove and said protrusion comprises a ridge sized to be received by said groove.
13. The scroll compressor of Claim 12 wherein said groove is disposed on said valve chamber and said ridge is disposed on said valve retainer.
14. The scroll compressor of Claim 11 wherein said body has a body top spaced by a body side from a body bottom, said body having a pressure hole on said body side extending to said body bottom, said pressure hole for creating suction on said body bottom for retaining said valve.
15. The scroll compressor of Claim 11 wherein said body has at least one leg.
16. The scroll compressor of Claim 15 wherein said protrusion is disposed on one of said at least one leg and said valve chamber.
17. The scroll compressor of Claim 16 wherein said leg is flexible between said engaged position and said disengaged position.

18. The scroll compressor of Claim 15 wherein said at least one leg comprises a first leg and a second leg, a discharge passage for communicating gas from said valve chamber to said discharge pressure chamber spaced between said first leg and said second leg.

19. A method of retaining a valve for a compressor:
 - disposing a valve in a valve chamber of a non-orbiting scroll;
 - positioning a valve retainer relative to the valve chamber; and
 - flexing a portion of the valve retainer between a disengaged position and an engaged position, the engaged position in which the valve retainer is engaged to the non-orbiting scroll and the disengaged position in which the valve retainer is disengaged from the non-orbiting scroll.